

**II. Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-6. (cancelled)

Claim 7. (currently amended) A suppository based delivery system for induction of an immune response, said suppository comprising:

(a) a vaccine or vaccine adjuvant(s) of ~~whole or fractionated viral or other microbial pathogens, or their purified cellular constituents, whether native, mutated, synthetic, cloned or recombinantly expressed and combinations thereof, that comprises nucleic acids, proteins, lipids, or combinations thereof capable of producing humoral- or cellular-mediated immunity in humans or animals;~~ and

(b) a suppository base, comprising ~~polyethylene glycol or a combination pharmaceutically acceptable amounts~~ of polyethylene glycol and polysorbate;

wherein the suppository is adapted to be inserted into the ~~anorectal or urogenital orifice of a human or animal so as to allow the suppository to be in contact with tissues of the anorectal or urogenital orifice to facilitate transfer of suppository material therethrough, and~~

~~wherein said combination is comprised of about 75% to about 98% by weight polyethylene glycol and about 2% to about 25% by weight polysorbate.~~

Claims 8-11. (cancelled)

Claim 12. (currently amended) A suppository-based delivery system for induction of an immune response, said suppository comprising:

(a) a vaccine or vaccine adjuvant(s) comprising ~~purified, mutated, synthetic or genetically engineered constituents of known pathogens of urogenital pathogens,~~

~~anorectally pathogens and combinations thereof whole microbial pathogens capable of producing humoral- or cellular-mediated immunity in humans; and~~

(b) a suppository base comprising ~~polyethylene glycol~~ or a combination of about 98% by weight polyethylene glycol and about 2% by weight polysorbate;

~~wherein said combination is comprised of about 75% to about 98% by weight polyethylene glycol and about 2% to about 25% by weight polysorbate, wherein the polyethylene glycol has an average molecular weight of about 950 to about 3700, and wherein the suppository comprises from about 50% to greater than 99% by weight of the suppository base; wherein the said suppository is adapted to be inserted vaginally or rectally so as to allow the suppository to be in contact with mucous membrane to facilitate transfer of vaccine or vaccine adjuvant(s) material therethrough.~~

Claim 13. (cancelled)

Claims 14-17. (cancelled)

Claim 18. (currently amended) A method for producing an immune response in humans or animals, said method comprising the steps of:

(a) inserting a suppository into ~~an anorectal or a urogenital orifice of a human or animal, wherein said suppository comprises a vaccine or vaccine adjuvant(s) material comprised of whole, fractionated viral or other of microbial pathogens, or their purified cellular constituents, whether native, mutated, synthetic, cloned or recombinantly expressed, that comprises nucleic acids, proteins, or combinations thereof capable of producing humoral or cellular-mediated immunity against urogenital or anorectal disease in humans or animals and a suppository base, wherein the suppository base comprises polyethylene glycol or a combination pharmaceutically acceptable amounts of~~ polyethylene glycol and polysorbate; and

(b) contacting the suppository with mucosal tissue at and internal to the ~~anorectal or urogenital orifice to facilitate transfer of the vaccine or vaccine adjuvant material therethrough and induce an immune response in the human or animal, and~~

~~wherein said combination is comprised of about 75% to about 98% by weight polyethylene glycol and about 2% to about 25% by weight polysorbate.~~

Claims 19-20 (cancelled)

Claim 21. (New) The suppository-based delivery system of claim 7, wherein said suppository base comprises about 98% of by weight of said polyethylene glycol and about 2% by weight of said polysorbate.

Claim 22. (New) The suppository-based delivery system of claim 7 which further comprises thimersol as a preservative.

Claim 23. (New) The suppository-based delivery system of claim 7, wherein said urogenital orifice is a vagina.

Claim 24. (New) The suppository-based delivery system of claim 12, which further comprises thimersol as a preservative.

Claim 25. (New) The method of claim 18, wherein said suppository base comprises about 98% of said polyethylene glycol and about 2% of said polysorbate.

Claim 26. (New) The method of claim 18, wherein said urogenital orifice is a vagina.

Claim 27. (New) A method of providing prophylaxis against a urogenital infectious disease comprising urogenitally administering a suppository-based delivery system of claim 7 to a human.

Claim 28. (New) The method of claim 27, wherein said urogenital infectious disease is a urinary tract infection.

Claim 29. (New) The method of claim 27, wherein said urogenital administration is vaginal administration.

Claim 30. (New) A method of providing prophylaxis against a urogenital infectious disease comprising vaginally administering a suppository-based delivery system of claim 12 to a human.

Claim 31. (New) The method of claim 30, wherein said urogenital infectious disease is a urinary tract infection.